

Abstract

The invention relates to a method for converting hydrocarbon gases into hydrocarbon liquids, wherein the Fischer-Tropf method is used. The Fischer-Tropf method produces hydrocarbon liquids and a residual gas comprising at least hydrogen, carbon monoxide and hydrocarbons whose carbon number is 6 maximum, carbon dioxide and optionally nitrogen. According to the invention, the residual gas undergoes a separation process producing at least one gas flow comprising methane and for which the level of recovery of hydrogen and carbon monoxide is at least 60 %, at least one gas flow whose level of recovery of carbon dioxide is at least 40 % and at least one additional gas flow mainly comprising hydrocarbons whose carbon number is at least 2.